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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/062,290	01/31/2002	Raja G. Achari	NPCI-0294/719-127CON3	1773

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EXAMINER	
KIM, JENNIFER M	

ART UNIT	PAPER NUMBER
1617	

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14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/062,290	Applicant(s) ACHARI ET AL.	
	Examiner Jennifer Kim	Art Unit 1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 May 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30 and 35-61* is/are pending in the application.

4a) Of the above claim(s) *1,2,12 and 18-23* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3-11,13-17,24-30 and 35-61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

The amendment filed May 9, 2003 have been received and entered into the application.

Applicants' arguments with respect to claims 3-11, 13-17, 24-20 and 35-61 have been considered but are moot in view of the new ground(s) of rejection. However, the double patenting rejection set forth in last office action is viable and maintained.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 3-17, 24-30, 37-40, 45, 49, 50, 51, 56 and 61 are rejected under 35 U.S.C. 102(b) as being anticipated by Merkus (WO 94/22445) as evidenced by El-Rashidy et al. (U.S.Patent No. 5,888,534) of record.

Merkus teaches a phramceutical composition for the intranasal administration (e.g. spray) comprising apomorphine in the range of 0.1 to 2mg and a sugar alcohol (e.g. mannitol and sorbitol).(abstract, page 3, lines 23-29, page 7, lines 28-29, page 9, lines 9-14, Example 1A-2).

Markus teaches that above composition results in a surprisingly high bioavailability and superior stability of apomorphine. (page 7, lines 10-17). Markus teaches that apomorphine composition can be formulated with a variety of pharmaceutically acceptable excipient, comprising methylcellulose and derivatives, preservataives, buffers, anti-oxidants, buffers, viscosity enhancing agents and agents to adjust the pH, phosphate buffer, sodium metabisulphite and water. (page 4, lines 24-33, page 8, lines 30-page 9, line 2).

El-rashiday et al. disclosed that apomorphine, in general about 2mg to about 10mg is a preferred dosage effective for the treatment of psychogenic impotence in male. (column 6, lines 44-48 and column 1, lines 20-22).

Applicants' recitation in claims 3, 15 and 24 of alleviating sexual dysfunction without causing substantial intolerable adverse side effects and the onset time of erection set forth in claims 24-28 would be inherent upon administration of Illum composition comprising same active agent, same therapeutic effective amount (2mg) and a same subject (patient).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 24, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merkus (WO 94/22445) as applied to claims 3-17, 24-30, 37-40, 45, 49, 50, 51, 56 and 61 above, and further in view of Johnson et al. (WO 98/31368).

Merkus as applied as before.

Merkus teach that apomorphine composition of pH adjusted to 4.5 – 5.5 and the composition may comprising may comprise buffering agents to adjust the pH.

Merkus does not teach the pH specified (about 3 to 3.5) in claim 36.

Johnson et al. teach a pharmaceutical composition for ameliorating male erectile dysfunction comprising apomorphine with pH of 3. (title, abstract, pages 13-14, Example 1). Johnson et al. teach that components such as preservatives, antioxidants, surfactants, viscosity enhancers, colouring agent, flavouring agents, pH modifiers and sweetners can be combined with the composition. (page 7, lines 14-30).

It would have been obvious to one of ordinary skill in the art to modify pH of Merkus to any of pH range that is stable for apomorphine composition including Applicants' claiming pH of 3 as taught by Johnson et al. because both references are related to a composition comprising same active agent comprising same utility constituted with same additives with same amounts. One would have been motivated to make such a modification with reasonable expectation of success because apomorphine well-known to be formulated with buffer to adjust pH as taught by Merkus composition and apomorphine composition are stable at pH 3 is well-known by Johnson et al.

Claims 39-44, 46-48, 52-55 and 57-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merkus (WO 94/22445) as applied to claims 3-17, 24-30, 37-40, 45, 49, 50, 51, 56 and 61 above, and further in view of El-Rashidy et al. (U.S.Patent No. 5,888,534) of record.

Merkus as applied as before.

El-Rashidy et al. teach on column 7, TABLE 1 that the polyethylene glycol and glycerin are suitable components of apomorphine formulation.

El-Rashidy et al. at column3 through column 4, Tables I-III, teach that ascorbic acid, glycerin and polyethylene glycol (stabilizing agents) are suitable for apomorphine composition.

The difference between Merkus reference and Applicants' invention is that combined formulation of apomorphine and the specific stabilizing agents (propylene glycol, glycerin, ascorbic acid).

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the composition of Merkus such that apomorphine composition to formulate with propylene glycol, glycerine and ascorbic acid because Merkus teaches that any pharmaceutically acceptable excipients and non-toxic ingredients and anti-oxidants can be formulated with apomorphine and because El-Rashidy et al. teach that propylene glycol, glycerin and ascorbic acid are suitable components in formulating apomorphine composition. One of ordinary skill in the art would have been motivated to make such a modification to formulate apomorphine composition taught by Merkus with components such as propylene glycol, glycerin,

ascorbic acid well-known to be suitable by El-Rashidy et al. to achieve a stable apomporine nasal formulation well taught by Merkus. Absent any evidence to contrary there would have been reasonable expectation of successfully formulating apomorphine composition of Merkus combined with El-Rashidy's suitable components to conveniently administered stable intranasal apomorphine.

For these reasons the claimed subject matter is deemed to fail to patentably distinguish over the state of the art as represented by the cited references. The claims are therefore properly rejected under 35 U.S.C. 103.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 36 and 47-49 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 6,436,950 B1. Although the conflicting claims are not identical, they are not

patentably distinct from each other because it encompasses same subject matter since they claims are drawn to same technical fields, which constituted with same active agents, same reducing agents and same pH value.

Claims 41-44, 50 and 52-57 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of copending Application No. 09/665,500. Although the conflicting claims are not identical, they are not patentably distinct from each other because it encompasses same subject matter since the claims are drawn to same technical fields, which constituted with same active agents, same solubilizing agents.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 24-28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 21-32 and 39 of copending Application No. 09/882,746. Although the conflicting claims are not identical, they are not patentably distinct from each other because it encompasses same subject matter since the claims are drawn to same technical fields, which constituted with same composition comprising same active agents with same onset of action.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 3, 39, 47-49, 50, 51 and 59-61 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 62, 71 and 73 of copending Application No. 10/062,021 and claims 62-71 of copending Application No. 10/062,020. Although the conflicting claims are not identical, they are not patentably distinct from each other because they encompasses same subject matter since the claims are drawn to same technical fields, which constituted with same composition comprising same active agents with same mechanism of action.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

None of the claims are allowed.

Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Kim whose telephone number is 703-308-2232. The examiner can normally be reached on Monday through Friday 6:30 am to 3 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 703-305-1877. The fax phone number for the organization where this application or proceeding is assigned is 703-308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

Sreenivasan Padmanabhan
Supervisory Examiner
Art Unit 1617

11/17/03

jmk
November 13, 2003